CLAIMS

1. Method of assaying nucleic acids by molecular hybridization , characterized by the fact that it includes the following step :
   - taking samples of biological material by a sampling device (1; 13) comprising abrasive sampling means (2 ;15, 16) capable of retaining biological material in the form of cells.
2. Method according to Claim 1, characterized by the fact that the sampling of biological material is done in the surrounding air.
3. Method according to any of claims 1 or 2, characterized by the fact that the sampling is done outside of a laboratory where the assaying will be done, and in that the method includes a step of transport of the abrasive sampling means (2;15,16) loaded with their respective samples of biological material to said laboratory.
4. Method according to any of the preceding claims, characterized by the fact that it furthermore includes a step of extraction of the nucleic acids, comprising
   - an immersion step into an extraction buffer of the abrasive sampling means (2 ;15, 16) loaded with their respective samples of biological material
   - a step of agitation in the extraction buffer
   - a separation step, and
   - a recovery step for recovering clarified solution containing the nucleic acids.
5. Method according to Claim 4, characterized by the fact that the separation step consists in a centrifugation, and the supernatant constitutes the clarified solution.
6. Method according to any of the preceding claims, characterized by the fact that the assaying by molecular hybridization is done by polymerase chain reaction (PCR).
7. Method according to any of the preceding claims, characterized by the fact that the assaying of nucleic acids by molecular hybridization is done in order to determine the presence of a pathogenic agent in the biological material.
8. Method according to any of the preceding claims, characterized by the fact that the biological material consists of material of plant origin.
9. Kit for implementing the method according to any of claims 1 to 8, characterized by the fact that it comprises a sampling device (1 ; 12) comprising abrasive sampling means (2 ; 14,15) able to retain biological material in the form of cells.
10. Kit according to Claim 9, characterized by the fact that the sampling means (2; 16, 17) comprise a solid material having an abrasive outer surface.

11. Kit according to Claim 11, characterized by the fact that the solid material is chosen from the group consisting of silica, glass, metals, carbon fibers and plastics.

12. Kit according to any of claims 10 and 11, characterized by the fact that the abrasive outer surface comprises asperities able to retain cells of biological material.

13. Kit according to any of claims 9 to 12, characterized by the fact that the sampling device (2, 13) comprises a support (3,5,6 ;14,17) able to support the abrasive sampling means (2; 15,16).

14. Kit according to any of claims 9 to 13, characterized by the fact that it comprises means (11) for the transport of the abrasive sampling means (2; 15, 16)

15. Kit according to any of claims 9 to 14, characterized by the fact that it comprises means of identification of the abrasive sampling means.

16. Kit according to any of claims 9 to 15, characterized by the fact that it comprises extraction buffer for assaying nucleic acids by hybridization.

17. Kit according any of the preceding claims, characterized by the fact that it comprises specific reagents of PCR reactions.